

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003268**Date Inspected:** 03-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shanghai**Quality Control Contact:** Don Walton**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG) and Sub-Assemblies**Bid Item:** 77,78,79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Splices (46 Each), Shim Plates X3305A (40 Each) and X3305E (40 Each), NOI Number 6443: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splices (46 Each), Shim Plates X3305A (40 Each) and X3305E (40 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to high DFT readings.

Bike Path Panels BK4A-060, BK4A-062 and Stiffeners SEG3003 (2 Each), NOI Number 6444: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panels BK4A-060, BK4A-062 and Stiffeners SEG3003 (2 Each). Test results recorded x3 surface profile readings in the range of 67 to 76 μm and x1 soluble salts reading of 15.2 ($\mu\text{s/cm}$). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection Bike Path Panels BK4A-060 and BK4A-062 prior to proceeding with process to the next check point due to additional required grinding and re-blasting. No other discrepancies noted on remaining items and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next

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check point.

Bike Path Panels BK4A-060 and BK4A-062, NOI Number 6447: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panels BK4A-060 and BK4A-062. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Splices (46 Each), Shim Plates X3305A (40 Each) and X3305E (40 Each), NOI Number 6449: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition Splices (46 Each), Shim Plates X3305A (40 Each) and X3305E (40 Each) for dry film thickness (DFT). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Lamp Bracket Externals LB3100 and LB3001 (2 Each), NOI Number 6449: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Lamp Bracket Externals LB3100 and LB3001 (2 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to failed MEK test results.

Galvanized Traveler Rails (12 Each) and Crash Barrier External E2-SB26A-001 PP111.5-PP112, NOI Number 6450: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Traveler Rails (12 Each) and Crash Barrier External E2-SB26A-001 PP111.5-PP112. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4, NOI Number 6451: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4 in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Sub-Assemblies (Tower)

Tower Head Internal ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2082: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Head Internal ESD1-TL6-2 and SSD1-TL6-1 for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to low DFT readings, holidays runs and sags.

Miscellaneous Sub-Assembly Plates (105 Each), NOI Number T2083: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Miscellaneous Sub-Assembly Plates (105

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Each). Test results recorded x3 surface profile readings in the range of 67 to 76 μm . No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head External ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2085: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Tower Head External ESD1-TL6-2 and SSD1-TL6-1 was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted with x3 @ grade 5 and x1 soluble salts reading of 19.0 ($\mu\text{s/cm}$). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Miscellaneous Sub-Assembly Plates (240 Each), NOI Number T2086: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Miscellaneous Sub-Assembly Plates (240 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work (re-blast) and re-submit for inspection prior to proceeding with process to the next check point due to low DFT readings and incorrect coating system installed on all edges.

Tower Head External WSD1-TL6-4 and NSD1-TL6-3, NOI Number T2087: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Tower Head External WSD1-TL6-4 and NSD1-TL6-3 was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to dry spray and holidays.

Tower Head Curved Diaphragm Top, NOI Number T2088: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Head Curved Diaphragm Top in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By: Cason,Kenneth

Quality Assurance Inspector

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Reviewed By: Miller,Mark

QA Reviewer